



# Facts

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## Pet Food and Mad Cow Disease???

Domestic cattle and cats, humans, mink, sheep, goats, moufflon, deer, elk, kudu, gemsbok, nyala, oryx, eland, cheetah, puma, tiger, ocelot, bison, ankole cow, and lion are some of the animals affected by transmissible spongiform encephalopathies or TSE's. All of these diseases are characterized by, 1) having a long (several months to years) incubation period from infection until clinical signs appear, 2) the central nervous system slowly degenerates and takes on a sponge like appearance, 3) resulting in death, usually within a few months to a couple of years after the onset of symptoms.

Sheep have had scrapie for hundreds of years with no known transmission to humans. In the mid 1980's cows in Great Britain started exhibiting signs of a scrapie like disease. In 1986 it was decided that this was a separate TSE and was named Bovine Spongiform Encephalopathy (BSE) and obtained the nickname of Mad Cow Disease. In 1995 variant Creutzfeldt-Jakob Disease (vCJD) was found in humans in the same general areas where Mad Cow Disease had been reported. Since the discovery of vCJD there has been much research on TSE's. There are still many unanswered questions, and the information in this article reflects current scientific thinking. As new information is discovered some of these thoughts may need to be revised.

It is believed by most scientists that these diseases are transmitted through feed that contains abnormal prion proteins. Some of the diseases such as scrapie in sheep and chronic wasting disease in deer and elk may be spread by means other than through feed. Biologically indistinguishable strains of prion proteins have been recovered from cases of BSE, vCJD, feline spongiform encephalopathy and spongiform encephalopathy in kudu and nyala.

Since BSE was first discovered in Great Britain it has spread to several other countries. It is believed that BSE entered these other countries through importation of live animals with the disease or feed ingredients containing the infective agent. What caused the first animal to contract BSE is subject to debate.

Many scientists believe consuming infective material from cows with BSE causes vCJD in humans. In the United Kingdom, people that work in close contact with animals or animal feeds have not been reported to have a higher incidence of vCJD than the general public.

There has never been a case of BSE or vCJD found in the United States in spite of active surveillance for over 10 years. There are import restrictions to keep it out, and feed rules to prevent the spread of BSE if it should ever occur here. The feed rule, animal proteins prohibited in ruminant feed, 21 CFR 589.2000, prohibits the feeding of all mammalian proteins to ruminants except for milk products, blood products, gelatin, pure pork, pure horse, and USDA inspected meat that has been cooked and offered for human consumption and further heat processed. The rule also requires record keeping and labeling certain feeds with a cautionary statement.

To prevent the spread of these diseases you should be aware of the following:

1. All animal feeds, except pet food, that contain any prohibited protein sources are to be labeled, "Do not feed to cattle or other ruminants." and must not be fed to any ruminant.
2. Pet food is exempt from this labeling requirement and often contains the prohibited materials. Therefore, do not allow ruminants access to pet food.
3. There is the potential for BSE to be spread if cross contamination of feed occurs because of using the same equipment to store, mix or feed materials to ruminants and non-ruminants.
4. People feeding ruminants are required to keep records of any animal proteins fed to any animals. These records include purchase invoices and one representative label for each lot from each shipment. These records are required to be kept for a minimum of one year. Pet food fed to pets is excluded from this record keeping requirement.